

**RECEIVED  
CENTRAL FAX CENTER****OCT 13 2005****MOTOROLA****FAX TRANSMITTAL SHEET**

Motorola, Inc.  
1303 East Algonquin Road  
IL01/3<sup>rd</sup> Floor  
Schaumburg, IL 60196

Telephone: 847.576.6735  
Facsimile: 847.576.0721

**23**

Number of Pages (including this page)

Date: October 13, 2005  
To: Board of Patent Appeals and Interferences  
Location: United States Patent and Trademark Office  
Fax No.: 571.273.8300  
From: Indira Saladi  
Subject: **IA00006**

---

**NOTICE:** This facsimile transmission may contain information that is confidential, privileged, or exempt from disclosure under applicable law. It is intended only for the person to whom it is addressed. Unauthorized use, disclosure, copying or distribution may expose you to legal liability. If you have received this transmission in error, please immediately notify us by telephone (collect) to arrange for return of the documents received and any copies made. Thank you.

---

**MESSAGE:**


Enclosed herewith, please find an APPEAL BRIEF for filing in  
application Serial No. 09/943,882.

<b>TRANSMITTAL FORM</b> <small>(to be used for all correspondence after initial filing)</small>	Application Number		09/943,882		
	Filing Date		8/31/01		
	First Named Inventor		Reinold, et al.		
	Group Art Unit		2663		
	Examiner Name		Nhat Q. Do		
Total Number of Pages in this Submission		Attorney Docket Number		IA00006	

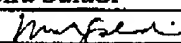
  

ENCLOSURES			(check all that apply)
<input type="checkbox"/> Fee Transmittal Form  <input type="checkbox"/> Fee Attached  <input type="checkbox"/> Amendment/Reply  <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/Declaration(s)  <input type="checkbox"/> Extension of Time Request  <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Documents <input type="checkbox"/> Response to Missing Parts/ Incomplete Application  <input type="checkbox"/> Response to Missing Parts Under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s)  <input type="checkbox"/> Licensing-Related papers  <input type="checkbox"/> Petition  <input type="checkbox"/> Petition to Convert to a Provisional Application  <input type="checkbox"/> Power of Attorney, Revocation, Change of Correspondence Address  <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CDs _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information  <input type="checkbox"/> Status Letter with appropriate copies  <input type="checkbox"/> Other Enclosure(s) (please identify below)	
Remarks X Facsimile Transmittal			

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm or Individual	Indira Saladi	Registration No.	45,759
Signature			
Date	October 13, 2005		

CERTIFICATE OF MAILING			
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first-class mail in an envelope addressed to: Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on the date listed below:			
Typed or printed name	Indira Saladi		
Signature		Date	10/13/05

**RECEIVED**  
**CENTRAL FAX CENTER****OCT 13 2005****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Before the Board of Patent Appeals and Interferences

---

Applicant: **JUERGEN REINOLD, ET AL.**  
Serial No.: **09/943,882**  
Title: **Vehicle Active Network with Fault Tolerant Devices**  
Filed: **August 31, 2001**  
Group Art Unit: **2663**  
Examiner: **Nhat Q. Do**

---

**BRIEF ON BEHALF OF APPELLANTS UNDER 37 CFR 41.37**

Pursuant to the Notice of Appeal mailed June 9, 2004 and the Notification of Non-Compliant Appeal Brief mailed September 14, 2005 in connection with the above-identified patent application, the applicant respectfully submits the instant Brief on Appeal in accordance with 37 C.F.R. § 41.37.

Indira Saladi  
Attorney of Record

Motorola, Inc.  
Intellectual Property Section  
Law Department  
1303 E. Algonquin Rd.  
Schaumburg, IL 60196

Telephone: 847-576-6735  
Facsimile: 847-576-7021

SERIAL NO. 09/943,882

ATTY. DOCKET NO. IA00006

CONTENTS

I. <u>REAL PARTY IN INTEREST</u> .....	3
II. <u>RELATED APPEALS AND INTERFERENCES</u> .....	3
III. <u>STATUS OF CLAIMS</u> .....	3
IV. <u>STATUS OF AMENDMENTS</u> .....	3
V. <u>SUMMARY OF CLAIMED SUBJECT MATTER</u> .....	4
VI. <u>GROUND OF REJECTION TO BE REVIEWED ON APPEAL</u> .....	5
VII. <u>ARGUMENT</u> .....	5
VIII. <u>CLAIMS APPENDIX</u> .....	13
IX. <u>EVIDENCE APPENDIX</u> .....	17
X. <u>RELATED PROCEEDINGS APPENDIX</u> .....	17

SERIAL NO. 09/943,882

ATTY. DOCKET NO. 1A00006

**I. REAL PARTY IN INTEREST**

The real party in interest is Motorola, Inc. the assignee of the above-identified patent application. The assignment assigning rights to Motorola, Inc., is recorded in the United States Patent and Trademark Office ("USPTO") at Frame 012537 of Reel 0727.

**II. RELATED APPEALS AND INTERFERENCES**

There are no related interferences.

An appeal against the rejection of the each of the following related patent applications has been filed:

Serial number 09/943,921 entitled VEHICLE ACTIVE NETWORK WITH BACKBONE STRUCTURE;

Serial number 09/944,892 entitled VEHICLE ACTIVE NETWORK WITH RESERVED PORTIONS

Serial number 09/944,893 entitled VEHICLE ACTIVE NETWORK WITH DATA ENCRYPTION.

**III. STATUS OF CLAIMS**

Currently, claims 1-5 and 7-17 are pending in the application. The pending claims are presented in Appendix A to this Brief. Claims 1-5 and 7-17 stand rejected and form the subject matter of this appeal. Claims 1-5 and 7-17 stand or fall together. In the final Office action dated February 10, 2004, the Examiner rejected claims 1-4 and 7-16 under 35 U.S.C. § 102(e) as being anticipated by Staiger, and rejected claims 5 and 17 under 35 U.S.C. § 103(a) as being unpatentable over Staiger.

**IV. STATUS OF AMENDMENTS**

The applicants' response to the final Office Action which was filed on May 10, 2004 contained no new amendments to the claims.

SERIAL NO. 09/943,882

ATTY. DOCKET NO. IA00006

**V. SUMMARY OF CLAIMED SUBJECT MATTER**

Although specification citations are inserted below in accordance with 37 C.F.R. § 41.37, these reference numerals and citations are merely examples of where support may be found in the specification for the terms used in this section of the brief. There is no intention to in any way suggest that the terms of the claims are limited to the examples in the specification. Although, as demonstrated by the reference numerals and citations below, the claims are fully supported by the specification as required by law, it is improper under the law to read limitations from the specification into the claims. Pointing out specification support for the claim terminology, as is done here to comply with rule 41.37, does not in any way limit the scope of the claims to those examples from which they find support. Nor does this exercise provide a mechanism for circumventing the law precluding reading limitations into the claims from the specification. In short, the reference numerals and specification citations are not to be construed as claim limitations or in any way used to limit the scope of the claims.

The invention, as defined in claims 1 and 10, and with reference to FIGS. 1-4 and 10, is a vehicle 10 including a first device, e.g., 136, and second device, e.g., 14, 16, 18 or 20 and an active network 30 communicatively coupling the first device 136 and the second device 16. At least a first communication link 140, 142 or 144 and a second communication link 140, 142 or 144 communicatively couple the first device to the active network 30. The device 136 may include an active network element formed integral with the device. A plurality of input/output ports communicatively couple the device 136 via the communication links 140, 142 or 144 to the active network 30. Data streams may be communicated along each of the communication paths 140, 142 and 144 to a destination device coupled to the active network 30.

SERIAL NO. 09/943,882

ATTY. DOCKET NO. LA00006

As depicted in FIG. 11, the device 136 may be network sub-system 152 including a plurality of devices 154, 156 or 158. The sub-system 152 incorporates an active network element 166 that is coupled to the active network 30. Still in further alternative, the device 136 may be redundant elements, whether devices or active network elements 172 and 174, FIG. 12.

#### **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Whether Claims 1-5 and 7-17 are patentable under 35 U.S.C. § 102(e) over Staiger, U.S. Patent No. 6,292,718.

Whether Claims 5 and 17 are patentable under 35 U.S.C. § 103(a) over Staiger, U.S. Patent No. 6,292,718.

#### **VII. ARGUMENT**

In the final Office action dated February 10, 2004, the examiner states "Staiger discloses in figure 3 a network for supporting multiple types of communication task comprising controlling, testing...; therefore the network of figure 3 is an active network". In other words, the Examiner considers appropriate to give to the term "active network" the broadest possible interpretation by considering the word "active" as a simple adjective to the word "network"; in this light, an "active network" is a network capable of doing any kind of action. Following the interpretation of the examiner, every network is an active network, due to the fact that it is at least able of establishing a connection. Due to the fact that it is impossible to claim a network which is not active with the meaning given by the examiner (a non-active network, according to the examiner, is a network which does not do anything, and thus it is a completely useless network), according to the examiner the word "active" does not confer any kind of limitation to the word "network".

Furthermore, the examiner states that "The features upon which applicant relies and relating to an active network are not recited in the rejected claims. Although the claims are

SERIAL NO. 09/943,882

ATTY. DOCKET NO. IA00006

interpreted in light of the specification, limitations from the specification are not read into the claims. Furthermore, nowhere the specification provides a clear definition of the claimed "active network" or limits what an "active network" can perform. Although it may be true that an "active network" can be interpreted as a network that performs the functions as argued in the Remarks and stated in the Affidavit, such an interpretation is not the only possible interpretation."

Is the above interpretation of the word "active" given by the examiner correct and conform to the U.S. patent practice established by the Manual of Patent Examining Procedure?

According to MPEP § 2111.01:

"during examination the pending claims must be given their broadest reasonable interpretation consistent with the specification"

"the broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach"

"When not defined by applicant in the specification, the words of a claim must be given their plain meaning. In other words, they must be read as they would be interpreted by those of ordinary skill in the art."

"During the examination the pending claims must be interpreted as broadly as their terms reasonably allow. This means that the words of the claims must be given their plain meaning unless applicant has provided a clear definition in specification."

"Especially in non-chemical cases, the words in a claim are generally non limited in their meaning by what is shown or disclosed in the specification; It is only when the specification provides definitions for terms appearing in the claims that the specification can be used in interpreting claim language."



SERIAL NO. 09/943,882

ATTY. DOCKET NO. LA00006

In the specification the applicant does not give a clear definition of an active network (as recognized by the examiner the final office action) and also does not teach all the instructions for realizing an active network. The reason is simple: those of ordinary skill in the art know perfectly what an active network is, what an active network does and how to realize an active network. This is not an arbitrary assumption made by the attorney, but is based on the Affidavit under 37 CFR 1.132 made by Juergen Reinold, one of the inventors, who is also an expert in the field of computing and networking, copy attached and entered by the Examiner as noted in the final Office Action dated February 10, 2004.

According to the aforementioned part of the MPEP:

*"When not defined by applicant in the specification, the words of a claim must be given their plain meaning. In other words, they must be read as they would be interpreted by those of ordinary skill in the art."*

Owing to the fact that applicant does not provide a special definition of the term "active network", such term must be given its plain meaning, i.e. it must be read as it would be interpreted by those of ordinary skill in the art. In any case, the broadest reasonable interpretation must be consistent with the specification and must also be consistent with the interpretation that those skilled in the art would reach. The interpretation of the term "active network" given by those of ordinary skill in the art is clear (see the aforementioned Affidavit and attached references): *"inter alia*, an active network is a network including nodes capable of performing custom operations on the messages that pass through the nodes". Such interpretation is also consistent with the specification, which does not define what an active network is, but well define what an active network is not (i.e. an active network is not a BUS network of the type disclosed by Staiger).

To give to the term "active network" the aforementioned meaning associated by the examiner, an "active network" is a network capable of doing something, it is clear that the

SERIAL NO. 09/943,882

ATTY. DOCKET NO. IA00006

term "active network" has a meaning that is not consistent with the interpretation that those skilled in the art would reach (see the aforementioned Affidavit and references). Furthermore, the term "active network" is given a meaning that is not consistent with the specification; according to this meaning, e.g., a BUS network is an active network, but in the specification it is clearly stated that a BUS network is not an active network. Both such considerations demonstrate without any doubt that this interpretation does not conform to the teaching of the MPEP and thus it is not appropriate.

Claim 1 positively recites an active network, which is a specific physical structure known to have particular characteristics, within a vehicle. This active network is not a bus architecture and is not a passive network or a combination of a passive network and a bus architecture or any other type of network structure than an active network structure. Staiger does not disclose any active network and thus claims 1 or 10 cannot be anticipated by Staiger. To establish a *prima facie* case of obviousness, and hence to find claims 1 or 10 unpatentable under 35 U.S.C. § 103(a) and over Staiger, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all of the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not be based upon applicant's disclosure. MPEP at § 2142. In the present case, Staiger fails to teach or even suggest the use of an active network within a vehicle. Thus claim 1 is not obvious in view of Staiger.

In determining whether the claims meet the requirements of patentability including § 102(e) and 103(a), the applicants' disclosure is properly relied upon to determine the meaning of terms used in the claims. While doing so, the perspective of the person of ordinary skill in

SERIAL NO. 09/943,882

ATTY. DOCKET NO. LA00006

the art must be considered, particularly with respect to claimed elements that are well know. In such cases, it is not necessary for the applicants to describe those elements in detail, and the element should be considered to include all art-recognized hardware or combination of hardware and software techniques for implementing that element. Furthermore, it is appropriate to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997) (emphasis added). Limitations appearing in the specification but not recited in the claim are not read into the claim. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow.... The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed.... An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process."). See MPEP at § 2106.

The issue of patentability under § 103 raised by the Office action, and which the applicant must overcome, is whether Staiger renders unpatentable claims 5 and 17 under 35 U.S.C. § 103(a).

The applicants claim vehicles and methods implemented within a vehicle comprising active networks. The applicants assert, supported by the aforementioned Declaration and references, that an active network is known to the skilled artisan to include, *inter alia* nodes capable of performing custom operations on the messages that pass through the nodes. An active network does not require a central server or computing resources. And, active network nodes are aware of the contents of messages transported and can participate in

SERIAL No. 09/943,882

ATTY. DOCKET NO. 1A00006

the processing and modification of the messages while they travel through the network. That is, an active network is a defined physical structure that is unlike other communication structures such as communication busses and/or passive networks. Moreover, the applicants clearly distinguish particular kinds of passive networks, such as bus architectures, in the background portion of the specification. Beginning at page 2, line 3 of the specification, the applicants explain that, in accordance with existing design philosophy, various communication bus structures for interconnecting control elements, sensors, actuators and like structures within vehicle have been used, but that these architectures suffer a number limitations. The applicants further explain, beginning at page 2, line 19 of the specification, that network structures have been incorporated in connection with bus architectures. These passive network structures do not provide sufficient reliability for vehicle functional requirements such as power train, suspension, airbag systems, and the like, and usage has been limited to applications wherein information technologies are added to the vehicle. Thus, as the applicants have explained, existing architectures have not met the needs of efficient, reliable integration of in-vehicle electronic technologies and plug-and-play upgradeability.

Clear from the foregoing discussion, the applicants have claimed a specific physical structure, namely an active network known to have particular characteristics, within a vehicle. This active network is not a bus architecture and is not a passive network or a combination of a passive network and a bus architecture or any other type of network structure than an active network structure. In light of the specification, the broadest reasonable interpretation of the term active network does not include bus structures and/or passive networks. For the claims to be anticipated or unpatentable, i.e., not to meet the requirements of § 102(c) or § 103(a), the prior art must teach or suggest each and every limitation contained in the claims, and particularly, in this case, must teach or suggest a vehicle including an active network. Because the prior art fails to teach or suggest this

SERIAL NO. 09/943,882

ATTY. DOCKET NO. IA00006

structure or methods employing such structures, claims 1-5 and 7-17 do meet the requirements of 35 U.S.C. § 102(e) and 35 U.S.C. § 103(a) and are patentable.

The Office action essentially admits that, unless the claims are read more broadly than the ordinary meaning of the term "active network" and the specification permits, the claimed vehicle and active network combination is not taught or suggested by the art and particularly by Staiger. Moreover, the applicants have pointed in the Reinold Declaration to the numerous and significant deficiencies of Staiger as a reference against the instant application and particularly as it relates to failing to describe active networks. It is only under what the applicants submit is an unreasonably broad interpretation of the term "active network," one not supported by what is known to the skilled artisan and the specification in that an active network is a known physical structure and that in addition the specification clearly describes what an active network is not, that the claims can be found to be unpatentable.

It is asserted that the applicants are arguing limitations not contained in the claims. The applicants submit the limitations they argue, the physical structure and function of the active network, are subsumed by the term itself. It is no more necessary to amend the claims to recite the physical structure of the active network to establish patentability, a known thing, than it would be necessary to recite an engine, transmission, chassis, wheels, seats, etc. of the claimed vehicle in order that it be understood. Doing so is redundant. This simply is not an instance where the applicants are arguing structures contained in the specification but not in the claims, but instead the applicants are arguing the structures defined by the term active network.

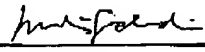
In view of the foregoing remarks, it is respectfully submitted that each of the rejections of claims 1-5 and 7-17 is patentable over the prior art, and that all of the pending claims should be allowed.

SERIAL No. 09/943,882

ATTY. DOCKET No. IA00006

Respectfully submitted,

Reinold, et al.

by:   
Indira Saladi  
Attorney for Applicant  
Registration No. 45,759  
Phone: (847) 576-6735  
Fax: (847) 576-0721

SERIAL NO. 09/943,882

ATTY. DOCKET NO. IA00006

**VIII. CLAIMS APPENDIX**

1. (original) In a vehicle comprising a first device and a second device and an active network communicatively coupling the first device and the second device, the first device having a first communication coupling to the active network and a second communication coupling to the active network.

2. (original) The vehicle of claim 1, wherein the active network comprises a plurality of active network elements coupled by connection media and wherein the first communication coupling couples to a first active network element and the second communication coupling couples to a second active network element.

3. (previously presented) The vehicle of claim 1, wherein the first device comprises a device active network element, and wherein the first communication coupling and the second communication coupling each couple to the device active network element.

4. (previously presented) The vehicle of claim 1, wherein the first device comprises a first device active network element and a second device active network element, and wherein the first communication coupling couples to the first device active network element and the second communication coupling couples to the second device active network element.

5. (original) The vehicle of claim 4, wherein the first device active network element and the second device active network element are communicatively coupled by connection media.

6. (canceled)

SERIAL NO.09/943,882

ATTY. DOCKET NO. IA00006

7. (previously presented) The vehicle of claim 1, wherein the first device comprises a first device active network element and a second device active network element, and wherein the first communication coupling and the second communication coupling each couples to the first device active network element and the second device active network element.

8. (previously presented) The vehicle of claim 1, wherein the first device has a first device element coupled to the first coupling and a second device element coupled to the second coupling.

9. (original) The vehicle of claim 1, wherein active network comprises a packet data network.

10. (original) In a vehicle comprising an active network for communications within the vehicle, a method of coupling a device to the active network comprising:

providing a first communication coupling from the device to the active network at a first location on the active network; and

providing a second communication coupling from the device to the active network at a second location on the active network.

11. (original) The method of claim 10, wherein the active network comprises a plurality of active network elements coupled by connection media, and wherein the step of providing a first communication coupling comprises coupling the device to a first active network element of the plurality of active network elements and the step of providing a



SERIAL NO. 09/943,882

ATTY. DOCKET NO. IA00006

second communication coupling comprises coupling the device to a second active network element of the plurality of active network elements.

12. (original) The method of claim 10, wherein the active network comprises a plurality of active network elements coupled by connection media, and wherein the step of providing a first communication coupling comprises coupling the device to an active network element of the plurality of active network elements and the step of providing a second communication coupling comprises coupling the device to the active network element.

13. (original) The method of claim 10, wherein the active network comprises a plurality of active network elements coupled by connection media and the device comprises a device active network element, and wherein the step of providing a first communication coupling comprises coupling the device active network element to a first active network element of the plurality of active network elements and the step of providing a second communication coupling comprises coupling the device active network element to a second active network element of the plurality of active network elements.

14. (original) The method of claim 10, wherein the active network comprises a plurality of active network elements coupled by connection media and the device comprises a first device active network element and a second device active network element, and wherein the step of providing a first communication coupling comprises coupling the first device active network element to a first active network element of the plurality of active network elements and the step of providing a second communication coupling comprises coupling the second device active network element to a second active network element of the plurality of active network elements.

SERIAL NO. 09/943,882

ATTY. DOCKET NO. IA00006

15. (original) The method of claim 10, wherein the active network comprises a plurality of active network elements coupled by connection media and the device comprises a first device active network element and a second device active network element, and wherein the step of providing a first communication coupling comprises coupling the first device active network element and the second device active network element to a first active network element of the plurality of active network elements and the step of providing a second communication coupling comprises coupling the first device active network element and the second device active network element to a second active network element of the plurality of active network elements.

16. (original) The method of claim 10, wherein the active network comprises a plurality of active network elements coupled by connection media and the device comprises a first device active network element and a second device active network element, and wherein the step of providing a first communication coupling comprises coupling the first device active network element and the second device active network element to an active network element of the plurality of active network elements and the step of providing a second communication coupling comprises coupling the first device active network element and the second device active network element to the active network element.

17. (original) The method of claim 16, wherein the steps of providing a first communication coupling and a second communication coupling comprises coupling the first device active network element to the second device active network element.

SERIAL NO. 09/943,882

ATTY. DOCKET NO. IA00006

**IX. EVIDENCE APPENDIX**

Submitted herewith is copies of evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132, entered by the examiner and relied upon by the appellant in the appeal, or relied upon by the examiner as to grounds of rejection to be reviewed on appeal.

As such, attached is an Affidavit under 37 CFR 1.132 made by Juergen Reinold, one of the inventors, submitted with Applicants amendment filed November 23, 2003 and entered by the Examiner as noted in the final Office Action dated February 10, 2004.

**X. RELATED PROCEEDINGS APPENDIX**

No decisions have been rendered by a court of the Board in any proceeding identified pursuant to paragraph (c)(1)(ii) of 37 C.F.R. § 41.37.